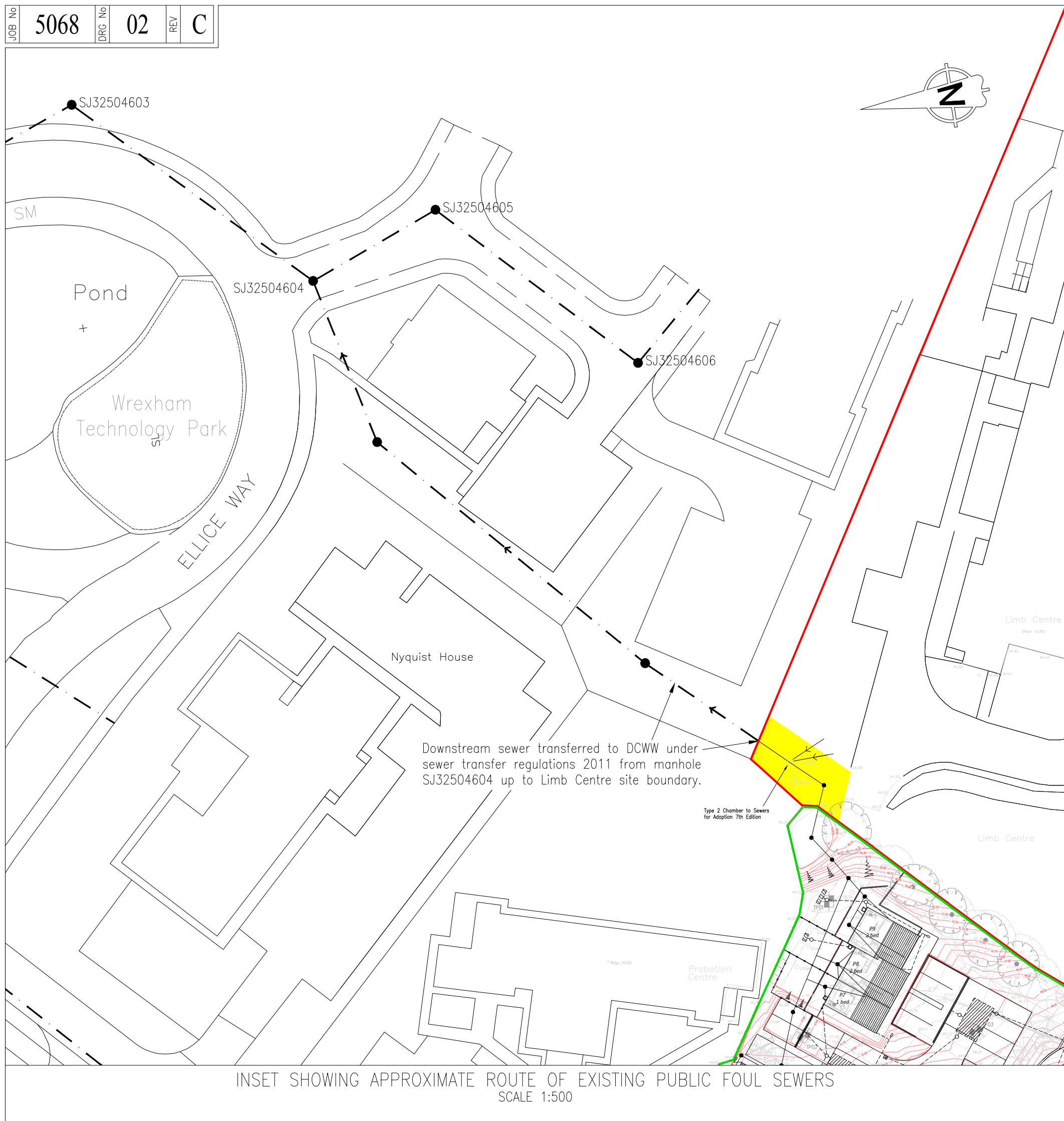
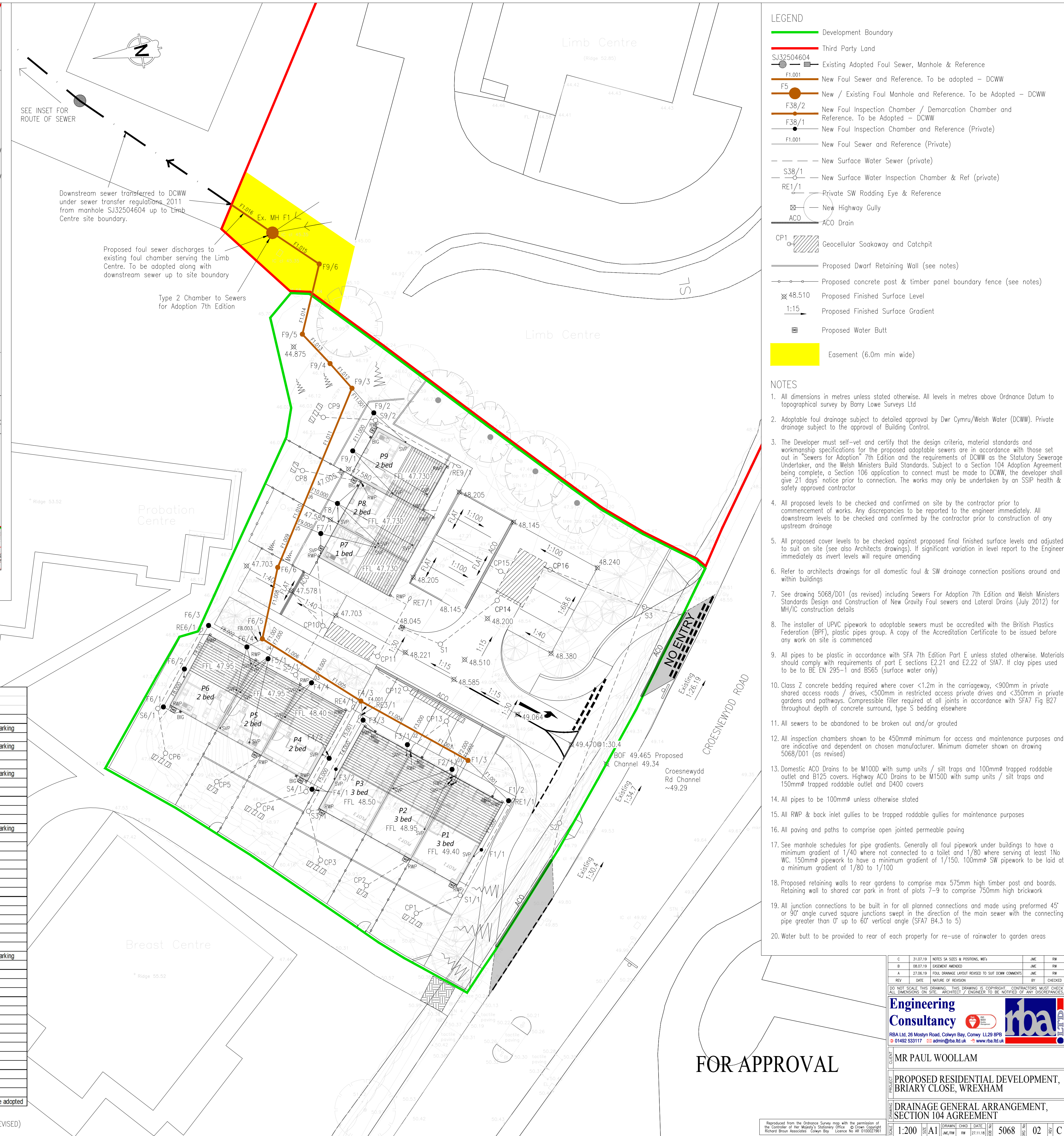




Manhole Number	Cover Level (m)	MH Depth (m)	MH Construction Type	Cover Ref Class	Opening (mm)	PN	Invert Level (m)	Pipes Out Diameter (mm)	Length (m)	Gradient (1:X)	Bedding Class	PN	Pipes In Invert Level (m)	Diameter (mm)	Backdrop (mm)	Comments
F1/1	49.250	0.450	4	A15		F1.000	48.800	100	5.500	27.5	S	F1.000	48.800	100		Class Z bedding below parking
F1/2	49.250	0.650	4	A15		F1.001	48.600	100	5.647	12.3	S & Z	F1.001	48.600	100		
F1/3	49.180	1.038	4	A15	B125 350	F1.002	48.142	100	1.000	16.9	Z	F1.001	48.142	100		Class Z bedding below parking
F2/1	49.065	0.865	4	A15		F2.000	48.200	100	1.538	13.1	S & Z	F2.000	48.083	100		
J1	49.035	0.952	-	Junction	A15	F1.003	48.083	100	5.034	16.9	S	F1.002	48.083	100		
F3/1	48.590	0.450	4	A15		F3.000	48.140	100	1.538	4.3	S & Z	F1.003	47.785	100		Class Z bedding below parking
J2	48.585	0.800	-	Junction	A15	F1.004	47.785	100	6.098	16.9	S	F1.003	47.785	100		
F3/2	48.350	0.450	4	A15		F4.000	47.900	100	5.537	20.1	S	F4.000	47.625	100		
F3/3	48.330	0.705	4	A15		F4.001	47.625	100	1.892	12.6	S	F4.000	47.625	100		
F4/1	48.250	0.450	4	A15		F5.000	47.800	100	3.491	46.5	S	F5.000	47.725	100		Class Z bedding below parking
F4/2	48.250	0.525	4	A15		F5.001	47.725	100	6.459	25.8	S & Z	F5.000	47.725	100		
F4/3	48.245	0.820	3	A15	B125	F1.005	47.425	100	5.144	24.2	S	F1.004	47.425	100		
F4/4	48.400	0.600	4	A15		F6.000	47.800	100	1.000	1.7	S	F1.005	47.212	100		
J3	48.250	1.038	-	Junction	A15	F1.006	47.212	100	5.019	24.2	S	F6.000	47.212	100		
F5/1	47.950	0.800	4	A15		F7.000	47.150	100	1.367	9.4	S	F1.006	47.005	100		
J4	47.800	0.795	-	Junction	A15	F1.007	47.005	100	1.340	24.4	S	F7.000	47.005	100		
F6/1	47.800	0.600	4	A15		F8.000	47.200	100	4.275	77.7	S	F8.000	47.145	100		
F6/2	47.800	0.655	4	A15		F8.001	47.145	100	4.914	75.6	S	F8.001	47.080	100		
F6/3	47.800	0.720	4	A15		F8.002	47.080	100	4.334	78.8	S	F8.002	47.025	100		
F6/4	47.950	0.925	4	A15		F8.003	47.025	100	1.719	68.8	S	F1.007	46.950	100		Class Z bedding below parking
F6/5	47.800	0.850	3	A15		F1.008	46.950	100	7.217	13.1	S & Z	F8.003	47.000	100		
F6/6	47.645	1.245	3	A15	B125 350	F1.009	46.400	100	4.716	79.8	S	F1.008	46.400	100		
F7/1	47.580	1.000	4	A15		F9.000	46.580	100	2.644	11.1	S	F1.009	46.341	100		
J5	47.000	0.659	-	Junction	A15	F1.010	46.341	100	3.368	79.8	S	F9.000	46.341	100		
F8/1	47.580	1.000	4	A15		F10.000	46.580	100	3.029	10.8	S	F1.010	46.299	100		
J6	47.000	0.701	-	Junction	A15	F1.011	46.299	100	11.057	79.5	S	F10.000	46.299	100		
F9/1	47.580	0.600	4	A15		F11.000	46.980	100	4.290	7.4	S	F1.011	46.400	100		
F9/2	47.580	1.180	4	A15	350	F1.001	46.400	100	3.246	17.1	S	F1.011	46.160	100		
F9/3	47.000	0.840	3	A15		F1.012	46.160	100	3.257	5.3	S	F1.011	46.210	100		
F9/4	46.200	0.650	3	A15		F1.013	45.550	100	3.983	12.3	S	F1.012	45.550	100		
F9/5	45.875	0.650	3	A15		F1.014	45.225	100	7.123	6.9	S	F1.013	45.225	100		
F9/6	45.250	1.050	3	A15	350	F1.015	44.200	100	5.549	5.5	S	F1.014	44.200	100		
Ex. MH F1	45.350	2.150	2	1200	B125 600x600	F1.016	43.150	150	EXISTING	EXISTING	S	F1.015	43.200	100		Ex Type 2 chamber to be adopted

FOUL MANHOLE / INSPECTION CHAMBER SCHEDULE

NOTE: TYPE 4 CHAMBERS SHOWN TO BE 450MM ARE INDICATIVE AND DEPENDENT ON CHOSEN MANUFACTURER; MINIMUM DIAMETER SHOWN ON DRAWING 5068/D01 (AS REVISED)



LEGEND

- Development Boundary
- Third Party Land
- SJ32504604
- F1.001
- F5
- F38/2
- F38/1
- F1.001
- New Surface Water Sewer (private)
- S38/1
- RE1/1
- New Highway Gully
- ACO
- CP1
- Geocellular Soakaway and Catchpit
- Proposed Dwarf Retaining Wall (see notes)
- Proposed concrete post & timber panel boundary fence (see notes)
- 48.510
- 1:15
- Proposed Finished Surface Level
- Proposed Finished Surface Gradient
- Proposed Water Butt
- Easement (6.0m min wide)

NOTES

- All dimensions in metres unless stated otherwise. All levels in metres above Ordnance Datum to topographical survey by Barry Lowe Surveys Ltd
- Adoptable foul drainage subject to detailed approval by Dwr Cymru/Welsh Water (DCWW). Private drainage subject to the approval of Building Control.
- The Developer must self-vet and certify that the design criteria, material standards and workmanship specifications for the proposed adoptable sewers are in accordance with those set out in "Sewers for Adoption" 7th Edition and the requirements of DCWW as the Statutory Sewerage Undertaker, and the Welsh Ministers Build Standards. Subject to a Section 104 Adoption Agreement being complete, a Section 106 application to connect must be made to DCWW, the developer shall give 21 days notice prior to connection. The works may only be undertaken by an SSIP health & safety approved contractor
- All proposed levels to be checked and confirmed on site by the contractor prior to commencement of works. Any discrepancies to be reported to the engineer immediately. All downstream levels to be checked and confirmed by the contractor prior to construction of any upstream drainage
- All proposed cover levels to be checked against proposed final finished surface levels and adjusted to suit on site (see also Architects drawings). If significant variation in level report to the Engineer immediately as invert levels will require amending
- Refer to architects drawings for all domestic foul & SW drainage connection positions around and within buildings
- See drawing 5068/D01 (as revised) including Sewers For Adoption 7th Edition and Welsh Ministers Standards Design and Construction of New Gravity Foul sewers and Lateral Drains (July 2012) for MH/IC construction details
- The installer of UPVC pipework to adoptable sewers must be accredited with the British Plastics Federation (BPF), plastic pipes group. A copy of the Accreditation Certificate to be issued before any work on site is commenced
- All pipes to be plastic in accordance with SFA 7th Edition Part E unless stated otherwise. Materials should comply with requirements of part E sections E2.21 and E2.22 of SFA7. If clay pipes used to be to BE EN 295-1 and B565 (surface water only)
- Class Z concrete bedding required where cover <1.2m in the carriageway, <900mm in private shared access roads / drives, <500mm in restricted access private drives and <350mm in private gardens and pathways. Compressible filler required at all joints in accordance with SFA7 Fig B27 throughout depth of concrete surround, type S bedding elsewhere
- All sewers to be abandoned to be broken out and/or grouted
- All inspection chambers shown to be 450mm minimum for access and maintenance purposes and are indicative and dependent on chosen manufacturer. Minimum diameter shown on drawing 5068/D01 (as revised)
- Domestic ACO Drains to be M1000 with sump units / silt traps and 100mmØ trapped roddable outlet and B125 covers. Highway ACO Drains to be M1500 with sump units / silt traps and 150mmØ trapped roddable outlet and D400 covers
- All pipes to be 100mmØ unless otherwise stated
- All RWP & back inlet gullies to be trapped roddable gullies for maintenance purposes
- All paving and paths to comprise open jointed permeable paving
- See manhole schedules for pipe gradients. Generally all foul pipework under buildings to have a minimum gradient of 1/40 where not connected to a toilet and 1/80 where serving at least 1No WC. 150mmØ pipework to have a minimum gradient of 1/150. 100mmØ SW pipework to be laid at a minimum gradient of 1/80 to 1/100
- Proposed retaining walls to rear gardens to comprise max 575mm high timber post and boards. Retaining wall to shared car park in front of plots 7-9 to comprise 750mm high brickwork
- All junction connections to be built in for all planned connections and made using preformed 45° or 90° angle curved square junctions swept in the direction of the main sewer with the connecting pipe greater than 0° up to 60° vertical angle (SFA7 B4.3 to 5)
- Water butt to be provided to rear of each property for re-use of rainwater to garden areas

C 31.07.19 NOTES SA SIZES & POSITIONS, MEY JMC RW
B 08.07.19 EXISTENCE AMENDED JMC RW
A 27.06.19 FPA DRAINAGE LAYOUT REVISED TO SUIT DOWN COMMENTS JMC RW
REV DATE NATURE OF REVISION BY CHECKED
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MR PAUL WOOLLAM

PROPOSED RESIDENTIAL DEVELOPMENT,
BRIARY CLOSE, WREXHAM

DRAINAGE GENERAL ARRANGEMENT,
SECTION 104 AGREEMENT

1:200 A1 DRAWING CODE DATE 27.11.19 5068 02 C

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